

CLAIMS

What is claimed is:

1. A method of providing information from a server to a client, the method comprising the steps of:
 - accepting, by the client, a request for information from a user;
 - 5 constructing, by the client, an identifier that specifies a source of the information, the identifier including a differentiating indicator;
 - transmitting, by the client, the identifier with the included differentiating indicator to the server;
 - tailoring, by the server, the information based on the differentiating indicator; and
 - 10 transmitting, by the server, the information from the server to the client.
2. The method of claim 1 wherein the identifier comprises a Uniform Resource Locator.
3. The method of claim 1 wherein the differentiating indicator comprises at least one of a device type identifier, a user group identifier, and a location identifier.
4. The method of claim 1 wherein the step of accepting a request for information further comprises the step of interpreting a code associated with an article of commerce.

5. The method of claim 4 wherein the step of interpreting a code associated with an article of commerce further comprises the steps of:

accepting a data stream;

determining the presence of at least one preamble character in the data stream;

5 determining a data stream rate; and

classifying the data stream as the code associated with an article of commerce based on at least one of the data stream rate and the presence of the at least one preamble character.

6. The method of claim 4 wherein the identifier includes the code associated with an article of commerce.

7. The method of claim 6 wherein the step of transmitting the information from the server to the client further comprises the steps of:

mapping the identifier to a target Uniform Resource Locator; and

transmitting the target Uniform Resource Locator to the client.

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8. The method of claim 7 wherein the mapping step further comprises the step of accessing an error handling system when an associated target file does not exist.

9. The method of claim 8 wherein the step of accessing an error handling system further comprises the steps of:

intercepting a corresponding server-generated error; and

defining the target Uniform Resource Locator to correspond to a default content

5 address.

10. The method of claim 8 wherein the step of accessing an error handling system further comprises the steps of:

intercepting a corresponding server-generated error;

executing a root error handler program; and

5 defining the target Uniform Resource Locator to correspond to an output of the root error handler program.

11. The method of claim 7 wherein the differentiating indicator comprises user identification data.

12. The method of claim 11 wherein the target Uniform Resource Locator includes the user identification data, the target Uniform Resource Locator corresponding to an online form that is responsive to the user identification data.

13. The method of claim 4 wherein the step of constructing an identifier further comprises the steps of:

comparing the code associated with an article of commerce with at least one known code type; and

5 defining the differentiating indicator to be the at least one known code type that matches the code associated with an article of commerce.

14. The method of claim 13 wherein the step of comparing the code associated with an article of commerce with at least one known code type further comprises the step of comparing the number of characters in each.
15. The method of claim 13 wherein the step of comparing the code associated with an article of commerce with at least one known code type further comprises the step of comparing the checksum of each.
16. The method of claim 4 further comprising the step of collecting, by the client, of behavioral data based on a user's activity.
17. The method of claim 16 wherein the differentiating indicator comprises the behavioral data.
18. The method of claim 17 wherein the differentiating indicator comprises at least one of a user frequency of code use, and a user frequency of code category use.
19. The method of claim 1 wherein the tailoring step further comprises the steps of: computing a score according to a predefined algorithm; and selecting the information based, at least in part, on the value of the score.
20. The method of claim 19 wherein the step of computing a score occurs at the server.

21. The method of claim 19 wherein the step of computing a score occurs at the client.
22. The method of claim 19 wherein the step of selecting the information occurs at the server.
23. The method of claim 19 wherein the step of selecting the information occurs at the client.
24. A method of providing information from a server to a client, the method comprising the steps of:
 - accepting, by the client, a request for information from a user by interpreting a code associated with an article of commerce;
 - constructing, by the client, an encrypted identifier that specifies a source of the information, the encrypted identifier including the code associated with an article of commerce;
 - transmitting, by the client, the encrypted identifier to the server;
 - mapping the encrypted identifier to a target Uniform Resource Locator; and
 - transmitting, by the server, the target Uniform Resource Locator to the client.

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25. A method of logging requests for information from a server to a client, the method comprising the steps of:
 - accepting, by the client, a request for information from a user by interpreting a code associated with an article of commerce;

5 constructing, by the client, an identifier that specifies a source of the information, the
identifier including the code associated with an article of commerce;
transmitting, by the client, the identifier to the server;
mapping, by the server, the identifier to a target Uniform Resource Locator;
logging at least one portion of a server header response; and
10 transmitting, by the server, the target Uniform Resource Locator from the server to the client.

26. The method of claim 25 further comprising the step of causing the target Uniform
Resource Locator to appear in the server header response.

27. A method of providing information from a server to a client, the method comprising
the steps of:
accepting, by the client, a request for information from a user;
constructing, by the client, an identifier that specifies a source of the information;
5 transmitting, by the client, the identifier to the server;
locating, by the server, the information based on the identifier;
accessing an error handling system when the server fails to locate the information based on
the identifier; and
transmitting, by the server, the information from the server to the client when the server
10 locates the information based on the identifier.

28. The method of claim 27 wherein the step of accessing an error handling system further comprises the steps of:

intercepting, by the server, a corresponding server-generated error; and

transmitting, by the server, default content information from the server to the client.

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29. The method of claim 27 wherein the step of accessing an error handling system further comprises the steps of:

intercepting, by the server, a corresponding server-generated error;

executing, by the server, a root error handler program; and

5 transmitting, by the server, default content information from the server to the client, the default content corresponding to an output of the root error handler program.

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30. The method of claim 27 wherein the step of constructing the identifier further comprises the step of including a differentiating indicator within the identifier.

31. A method of selecting a service level provided by a server to a client, the method comprising the steps of:

accepting a request for information from a user;

selecting, by the client, a content type;

5 constructing an identifier that specifies a source of the information;

including within the identifier a designator specifying the content type;

transmitting the identifier with the included designator to the server; and

executing, on the server, program instructions based on the designator.

32. The method of claim 31 wherein the program instructions cause the server to provide the selected content type.

33. The method of claim 32 further comprising the step of transmitting the information from the server to the client using the selected content type.

34. The method of claim 31 wherein the identifier comprises a Uniform Resource Locator.

35. The method of claim 31 wherein the content type comprises a static content.

36. The method of claim 31 wherein the content type comprises a dynamic content.

37. The method of claim 31 wherein the designator is determined by the client.

38. The method of claim 37 wherein the designator is determined at least in part from a code associated with an article of commerce.

39. A method of including supplementary data in a request for information from a server, the method comprising the steps of:

constructing an identifier that specifies a source of the information;

compressing the supplementary data using a persistent compression;

5 including the compressed supplementary data within the identifier; and

transmitting the identifier with the included compressed supplementary data to the server.

40. The method of claim 39 wherein the identifier comprises a Uniform Resource

Locator.

41. An article of manufacture comprising a program storage medium having computer readable program code embodied therein for causing a server to provide information to a client, the computer readable program code in the article of manufacture including:

computer readable code for causing a computer to accept a request for information from a

5 user;

computer readable code for causing a computer to construct an identifier that specifies a source of the information, the identifier including a differentiating indicator;

computer readable code for causing a computer to transmit the identifier with the included differentiating indicator to the server;

10 computer readable code for causing a computer to tailor the information based on the differentiating indicator; and

computer readable code for causing a computer to transmit the information from the server to the client, so as to deliver tailored information to the user.

42. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for causing a server to provide information to a client, the method steps comprising:

accepting a request for information from a user;

5 constructing an identifier that specifies a source of the information, the identifier including a differentiating indicator;

transmitting the identifier with the included differentiating indicator to the server;

tailoring the information based on the differentiating indicator; and

transmitting the information from the server to the client, so as to deliver tailored information

10 to the user.

43. An article of manufacture comprising a program storage medium having computer readable program code embodied therein for causing a server to provide information to a client, the computer readable program code in the article of manufacture including:

computer readable code for causing a computer to accept a request for information from a user by interpreting a code associated with an article of commerce;

5 computer readable code for causing a computer to construct an encrypted identifier that specifies a source of the information, the encrypted identifier including the code associated with an article of commerce;

computer readable code for causing a computer to transmit the encrypted identifier to the

10 server;

computer readable code for causing a computer to map the encrypted identifier to a target

Uniform Resource Locator; and

computer readable code for causing a computer to transmit the target Uniform Resource

Locator from the server to the client, so as to deliver the information to the user.

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44. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for causing a server to provide information to a client, the method steps comprising:

accepting a request for information from a user by interpreting a code associated with an

5 article of commerce;

constructing an encrypted identifier that specifies a source of the information, the encrypted identifier including the code associated with an article of commerce;

transmitting the encrypted identifier to the server;

mapping the encrypted identifier to a target Uniform Resource Locator; and

10 transmitting the target Uniform Resource Locator to the client, so as to deliver the information to the user.

45. An article of manufacture comprising a program storage medium having computer readable program code embodied therein for causing a computer to log requests for information from a server to a client, the computer readable program code in the article of manufacture including:

5 computer readable code for causing a computer to accept a request for information from a user by interpreting a code associated with an article of commerce;

computer readable code for causing a computer to construct an identifier that specifies a source of the information, the identifier including the code associated with an article of commerce;

10 computer readable code for causing a computer to transmit the identifier to the server;

computer readable code for causing a computer to map the identifier to a target Uniform Resource Locator;

computer readable code for causing a computer to log at least one portion of a server header response; and

15 computer readable code for causing a computer to transmit the target Uniform Resource Locator from the server to the client, so as to deliver information to the user.

46. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for causing a computer to log requests for information from a server to a client, the method steps comprising:

accepting a request for information from a user by interpreting a code associated with an

5 article of commerce;

constructing an identifier that specifies a source of the information, the identifier including the code associated with an article of commerce;

transmitting the identifier to the server;

mapping the identifier to a target Uniform Resource Locator;

10 logging at least one portion of a server header response; and
transmitting the target Uniform Resource Locator to the client, so as to deliver information to
the user.

47. An article of manufacture comprising a program storage medium having computer
readable program code embodied therein for causing a server to provide information to a
client, the computer readable program code in the article of manufacture including:
computer readable code for causing a computer to accept a request for information from a

5 user;
computer readable code for causing a computer to construct an identifier that specifies a
source of the information;
computer readable code for causing a computer to transmit the identifier to the server;

computer readable code for causing a computer to locate the information based on the
10 identifier;
computer readable code for causing a computer to access an error handling system when the
server fails to locate the information based on the identifier; and
computer readable code for causing a computer to transmit the information from the server to
the client when the server locates the information based on the identifier, so as to deliver the
15 information to the user.

48. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for causing a server to provide information to a client, the method steps comprising:

accepting a request for information from a user;

5 constructing an identifier that specifies a source of the information;

transmitting the identifier to the server;

locating the information based on the identifier;

accessing an error handling system when the server fails to locate the information based on the identifier; and

10 transmitting the information from the server to the client when the server locates the information based on the identifier, so as to deliver the information to the user.

49. An article of manufacture comprising a program storage medium having computer readable program code embodied therein for selecting a service level provided by a server to a client, the computer readable program code in the article of manufacture including:

computer readable code for causing a computer to accept a request for information from a user;

5 computer readable code for causing a computer to select a content type;

computer readable code for causing a computer to construct an identifier that specifies a source of the information;

computer readable code for causing a computer to include within the identifier a designator

10 specifying the content type;

computer readable code for causing a computer to transmit the identifier with the included designator to the server; and

computer readable code for causing a computer to execute program instructions based on the designator, so as to select the service level.

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50. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps to select a service level provided by a server to a client, the method steps comprising:

accepting a request for information from a user;

5 selecting a content type;

constructing an identifier that specifies a source of the information;

including within the identifier a designator specifying the content type;

transmitting the identifier with the included designator to the server; and

executing program instructions based on the designator.

10 transmitting the information from the server to the client using the selected content type, so as to select the service level.

51. An article of manufacture comprising a program storage medium having computer readable program code embodied therein for including supplementary data in a request for information from a server, the computer readable program code in the article of manufacture including:

5 computer readable code for causing a computer to construct an identifier that specifies a source of the information;

computer readable code for causing a computer to compress the supplementary data using a persistent compression;

computer readable code for causing a computer to include the compressed supplementary data within the identifier; and

computer readable code for causing a computer to transmit the identifier with the included compressed supplementary data to the server, so as to provide the server with the compressed supplementary data.

52. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps to include supplementary data in a request for information from a server, the method steps comprising:

constructing an identifier that specifies a source of the information;

5 compressing the supplementary data using a persistent compression;

including the compressed supplementary data within the identifier; and

transmitting the identifier with the included compressed supplementary data to the server.

53. A system to provide information from a server to a client in response to a request from a user, the system comprising:

a client comprising:

a user request interface;

- 5 an identifier constructor in communication with the user request interface, the identifier constructor constructing an identifier that specifies a source of the requested information, the identifier including a differentiating indicator; and
 - a first transmitter in communication with the identifier constructor;
 - a server in communication with the client, the server comprising:
- 10 an information tailoring apparatus for tailoring the requested information in response to the differentiating indicator; and
 - a second transmitter in communication with the information tailoring apparatus and the client;
- 15 wherein the first transmitter transmits the identifier with the included differentiating indicator to the server and the second transmitter transmits the requested information to the client.

54. A system to provide information from a server to a client in response to a request from a user, the system comprising:

 a client comprising:

 a code interpreter;

- 5 an identifier constructor in communication with the code interpreter, the identifier constructor constructing an encrypted identifier that specifies a source of the requested information, the encrypted identifier including a code associated with an article of commerce; and
 - a first transmitter in communication with the identifier constructor;
 - a server in communication with the client, the server comprising:

10 a mapping engine for mapping the encrypted identifier to a target Uniform Resource Locator;
and
a second transmitter in communication with the mapping engine and the client;
wherein the first transmitter transmits the encrypted identifier including the code associated
with an article of commerce to the server and the second transmitter transmits the target
15 Uniform Resource Locator to the client.

55. A system for logging requests for information from a server to a client, the system
comprising:
a client comprising:
a code interpreter;
5 an identifier constructor in communication with the code interpreter, the identifier constructor
constructing an identifier that specifies a source of the requested information, the identifier
including a code associated with an article of commerce; and
a first transmitter in communication with the identifier constructor;
a server in communication with the client, the server comprising:
10 a mapping engine for mapping the identifier to a target Uniform Resource Locator;
a usage monitor in communication with the mapping engine for logging at least one portion
of a server header response; and
a second transmitter in communication with the mapping engine and the client;

wherein the first transmitter transmits the identifier including the code associated with an
15 article of commerce to the server and the second transmitter transmits the target Uniform
Resource Locator to the client.

56. A system for providing information from a server to a client in response to a request
from a user, the system comprising:

a client comprising:

a user request interface;

5 an identifier constructor in communication with the user request interface, the identifier
constructor constructing an identifier that specifies a source of the requested information; and
a first transmitter in communication with the identifier constructor;

a server in communication with the client, the server comprising:

a locator for the server to locate the requested information in response to the identifier;

10 an error handling system in communication with the locator, the error handler system
executing an error handling routine when the locator fails to locate the requested information
in response to the identifier; and

a second transmitter in communication with the locator and the client;

wherein the first transmitter transmits the identifier to the server and the second transmitter
15 transmits the requested information to the client when the server locates the requested
information in response to the identifier, and transmits alternative content when the server
fails to locate the requested information in response to the identifier.

57. A system for selecting a service level provided by a server to a client, the system comprising:

a client comprising:

a user request interface for receiving a request for information;

5 a selector in communication with the user request interface, the selector selecting a content type;

an identifier constructor in communication with the selector, the identifier constructor constructing an identifier that specifies a source of the requested information, the identifier including a designator specifying the content type; and

10 a transmitter in communication with the identifier constructor;
a server executing program instructions in response to the designator;
wherein the transmitter transmits the identifier with the included designator to the server.

58. A system to include supplementary data in a request for information from a server, the system comprising:

a client comprising:

an identifier constructor for constructing an identifier that specifies a source of the requested

5 information;

a compression engine in communication with the identifier constructor, the compression engine compressing the supplementary data using a persistent compression, wherein the compressed supplementary data are included within the identifier; and

a transmitter for transmitting the identifier with the included compressed supplementary data

10 to the server.